Equity Office

2655 Campus Drive, Suite 100
San Mateo, CA 94403

phone: 650-372-3500
fax: 650-372-3605
www.equityoffice.com

May 14, 2008

Jerry Wickham
Alameda County Health Care Services Agency
Environmental Health Services, Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Fuel Leak Case No. RO0002900, First Quarter 2008 Groundwater Monitoring Report, 700 Independent Road, Oakland, California

Dear Mr. Wickham,

Enclosed is the First Quarter Groundwater Monitoring Report for the property at 700 Independent Road, Oakland, California. The quarterly monitoring report was prepared by Kleinfelder Inc. on behalf of Equity Office Properties – Industrial Portfolio, LLC. This quarterly monitoring report is being submitted to Alameda Health Care Services Agency, Environmental Health Services pursuant to your request in a letter to Mr. Peter A. McGing dated June 13, 2007 and Mr. James Soutter in a letter dated October 9, 2007.

I declare, under penalty of perjury, that the information and / or recommendations contained in the attached document is true and correct to the best of my knowledge.

Sincerely,
EOP – Industrial Portfolio, LLC.

James Soutter
Director – Engineering

Enclosure: First Quarter 2008 Groundwater Monitoring Report, 700 Independent Road, Oakland, California

KLEINFELDER
Bright People. Right Solutions.

FIRST QUARTER 2008
GROUNDWATER MONITORING REPORT
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

May 15, 2008

A Report Prepared for:

Equity Office Properties
2 North Riverside Plaza – Suite 2100
Chicago, IL 60606

FIRST QUARTER 2008
GROUNDWATER MONITORING REPORT
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

Kleinfelder Job No. 54504/5B
Fuel Leak Case No. RO0002900

Prepared by:

Gabriel Fuson
Staff Geologist

Charles Almestad, P.G., C.HG.
Principal Professional

REGISTERED GEOLOGIST
CHARLES H. ALMESTAD
No. 6259
Exp. 7/09
STATE OF CALIFORNIA

KLEINFELDER WEST, INC.
1970 Broadway
Suite 710
Oakland, California 94612
(510) 628-9000

May 15, 2008

KLEINFELDER
Bright People. Right Solutions.

TABLE OF CONTENTS

TABLES

PLATES

APPENDICES

1.0 INTRODUCTION

This report describes First Quarter 2008 groundwater monitoring activities at 700 Independent Road, Oakland California (the site). The work was performed by Kleinfelder for EOP Industrial Portfolio, LLC (EOP) in response to a request by Alameda County Environmental Health Services (ACEHS) staff in a letter to EOP dated June 13, 2007.

Kleinfelder performed the following field tasks discussed in detail in this report:

- Collected groundwater samples from the five existing monitoring wells for total petroleum hydrocarbon and volatile organic chemical analysis;
- Measured groundwater levels in the five monitoring wells; and
- Containerized the purge water generated during groundwater sampling for disposal.

2.0 BACKGROUND INFORMATION

This section presents a brief description of the site and a summary of previous investigations performed at the site.

2.1 SITE DESCRIPTION

The site is located at 700 Independent Road, in an industrial area of Oakland, California, and is approximately five acres in size. The site is situated approximately 2,000 feet northwest of the McAfee Stadium (Plate 1). A one-story warehouse/manufacturing building, a parking lot and a railroad spur occupy the site (Plate 2). The site is currently leased by the Eagle Bag Company, a plastic bag manufacturer. Near surface soils consist of clays and silty-clays with sandy inter-beds. First groundwater has generally been first encountered at a depth of approximately eight to 10 feet below ground surface (bgs).

2.2 PREVIOUS INVESTIGATIONS

Previous environmental work at the site includes the discovery and removal of an approximately 1,100-gallon capacity UST, and three subsequent subsurface investigations.

2.2.1 UST Discovery and Removal

A subsurface investigation performed for a prospective purchaser of the 700 Independent Road property uncovered the presence of petroleum hydrocarbons in soil and groundwater near the loading dock at the site. As a follow-up to this discovery, Kleinfelder searched regulatory agency records, performed a geophysical survey and identified a UST and associated piping in the vicinity of the western end of the loading dock.

On August 17, 2005, under permit from the City of Oakland Fire Department and the ACEHS, Golden Gate Tank Removal, Inc., a subcontractor of Kleinfelder, removed and disposed of one 1,100-gallon UST. Confirmation samples were collected from the sidewalls and bottom of the excavation pit. The analytical results indicated the presence of petroleum hydrocarbons at concentrations exceeding Regional Water

Quality Control Board (RWQCB), San Francisco Bay Region Environmental Screening Levels (ESLs). A report documenting the UST removal process and summarizing the analytical results was prepared and submitted to the City of Oakland Fire Department on November 1, 2005.

Based on the concentrations of petroleum hydrocarbons present, the Fire Department referred the case to the ACEHS, which became the lead government agency overseeing remedial actions at the site. The ACEHS assigned the Site Fuel Case Number RO0002900.

2.2.2 Subsequent Subsurface Investigations

In a letter dated February 24, 2006 the ACEHS requested that EOP prepare a work plan and carry out an investigation to delineate the extent of petroleum hydrocarbon impacted soil and groundwater at the site. On July 24, 25 and August 10, 2006, Kleinfelder performed a subsurface investigation consisting of the collection and analyses of soil and groundwater samples from 13 locations in the vicinity of the former UST. The analytical results of the soil samples indicated the presence of Total Petroleum Hydrocarbons as gasoline (TPH-g), benzene and xylenes, at concentrations up to 810 mg/Kg, 3,000 mg/Kg, and 33,000 mg/Kg, respectively.

In groundwater, TPH-g and Total Petroleum Hydrocarbons as diesel (TPH-d) were detected at concentrations up to 42,000 micrograms per liter (µg/L) and 4,190 µg/L, respectively. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were reported at concentrations up to 13,800 µg/L, 929 µg/L, 2,810 µg/L, and 3,140 µg/L, respectively. The results of this investigation were summarized in the September 27, 2006 report prepared by Kleinfelder titled *Site Field Investigation, 700 Independent Road, Oakland, California.*

In a letter dated October 6, 2006, the ACEHS requested that EOP prepare a work-plan to further delineate the horizontal and vertical extent of petroleum hydrocarbons at the site, including a soil vapor survey to assess the potential indoor vapor intrusion into the warehouse; installation of three groundwater monitoring wells within the impacted area; performing a 2,000-foot radius groundwater well survey; identifying potential utility pathways; and uploading the site's information into the GeoTracker system.

Between March 4 and 7, 2007, Kleinfelder collected soil, soil-vapor, and groundwater samples, and installed three monitoring wells (MW-1 through MW-3) at the site. No chemicals of concern were reported at or above ESLs in soil-vapor samples. In soil and groundwater, the highest petroleum hydrocarbon concentrations were reported in soil boring K-19 and in monitoring well MW-2, both located in the immediate vicinity of the former UST. In the soil sample collected from boring K-19, at a depth of 18-feet to 20-feet below ground surface (bgs), BTEX was reported at 11 mg/Kg, 26 mg/Kg, 33 mg/Kg, and 170 mg/Kg, respectively. In addition TPH-g and TPH-d were reported at 1,900 mg/Kg and 200 mg/Kg, respectively. In the groundwater sample from MW-2, TPH-g and benzene were reported at 38 mg/L and 11.6 mg/L, respectively.

The analytical results for TPH-g and TPH-d in soil and groundwater samples collected from monitoring well (MW-1) and boring (K-18), located approximately 70 to 90-feet east from the former UST location, were also found to be elevated. MW-1 and K-18 were believed to be hydraulically side-gradient to the former UST. In soil, TPH-g and TPH-d were reported at 12,000 mg/Kg and 588 mg/Kg at 19.5 feet bgs in MW-1. BTEX in soil at 19.5 feet bgs was reported at 63 mg/Kg, 250 mg/Kg, 310 mg/Kg, and 1,200 mg/Kg, respectively. In groundwater TPH-g and benzene were reported at 3.3 mg/L and 0.162 mg/L in monitoring well MW-1. To the north, west, and south of the former UST the extent of petroleum hydrocarbons in soil and groundwater was generally defined. Field activities and analytical results of the investigation were summarized in the May 11, 2007 report prepared by Kleinfelder titled *Further Site Investigation Report, 700 Independent Road, Oakland, California.*

In response to Alameda County Health Care Safety Agency's (ACHCSA) request for further investigation at the site, an additional subsurface investigation was conducted from January 21 to January 31, 2008. This work consisted of collecting and analyzing soil and groundwater samples from five borings (K-21 to K-25) to further characterize the vertical and lateral extent of contamination associated with the UST removed from the site in August 2005. Also, the work was performed to assess whether potential offsite sources have contributed to the petroleum hydrocarbons found in the subsurface at the site. Two of the borings were reamed out and groundwater monitoring wells were installed (MW-4 and MW-5).

No chemicals of concern were reported in groundwater collected from the borings at concentrations above the laboratory's reporting limit, except for TPH-g and TPH-d

reported in the groundwater samples collected from MW-4 and MW-5. TPH-g was reported slightly above the laboratory's reporting limit, at 56-µg/L and 55-µg/L, in the samples from MW-4 and MW-5, respectively. TPH-d was reported in the sample collected from MW-5, at a concentration of 544 µg/L. All of these concentrations are below their most current ESLs. No chemicals of concern were reported in soil at concentrations above the laboratory's reporting limit in the borings advanced during this scope of work.

2.2.3 Previous Quarterly Groundwater Monitoring

As part of the fourth quarter 2007 groundwater sampling event conducted in December, TDS analysis was performed on samples from MW-1, MW-2, and MW-3 to confirm the high-EC measurements with field instrumentation and to assess this condition. Reported TDS levels ranged from 8,600,000 mg/L to 17,000,000 mg/L.

Regional Water Board Resolution No. 89-39, "Sources of Drinking Water," states that if the EC of groundwater exceeds 5000 uS/cm EC (3,000 mg/L TDS) the water is not reasonably expected to be suitable to supply a public water system. Therefore, based on Resolution 89-23 and the TDS data from the ground-water samples collected in December 2007, groundwater beneath the 700 Independent Road property should not reasonably be considered to have an actual or potential beneficial use for drinking water.

3.0 FIELD ACTIVITIES

This section summarizes the groundwater monitoring activities performed at the site in the first quarter of 2008.

3.1 GROUNDWATER MONITORING ACTIVITIES

The first quarter 2008 groundwater-monitoring event took place on March 28, 2008. Prior to monitoring activities, field instrumentation was checked and calibrated.

3.1.1 Water Level Measurements

Prior to groundwater sample collection, the depth to water in each well was measured to the nearest 0.01-foot, using a clean, calibrated electronic water-level indicator. Water-level measurements were used to calculate the volume of water present in the well for sampling purposes. Water level measurements were also made to assess groundwater flow patterns as discussed in Section 4.1.

3.1.2 Groundwater Sample Collection

Upon completing the water-level measurements, Kleinfelder purged the monitoring wells with disposable bailers. The wells were purged of a minimum of three casing volumes of groundwater prior to collecting samples for chemical analysis. During purging, pH, temperature, and electrical conductivity were measured. Samples were collected when these field parameters became stable (three measurements within 10% of each other), or after three volume casings had been removed.

After purging, groundwater from each monitoring well was collected using a bailer. The groundwater sample was decanted into the appropriate laboratory supplied containers. The containers were labeled and subsequently placed into a pre-chilled cooler with ice for delivery to the laboratory for chemical analysis. Samples were delivered under Chain of Custody protocol.

3.1.3 Analytical Laboratory Parameters

Torrent Laboratory, Inc., a state-certified analytical laboratory, performed the chemical analysis for the first quarter 2008 groundwater monitoring event. Samples were analyzed for the following parameters:

- TPH-d using Environmental Protection Agency (EPA) Method 8015M, and
- BTEX, methyl tert butyl ether (MTBE), and TPH as gasoline, using EPA Method 8260B.

3.2 DECONTAMINATION PROCEDURES

Prior to performing groundwater level measurements and between measurements at each well location, the electronic water level indicator probe and cable was cleaned with an Alconox™ water solution and subsequently rinsed with tap water, followed by distilled water. Equipment used to sample each well, including disposable bailers and twine, was dedicated to each well and disposed of after each use.

3.3 INVESTIGATION-DERIVED WASTE (IDW) HANDLING PROCEDURES

Investigation-derived wastes (IDW), consisting of well purge water and decontamination rinsate fluids were containerized onsite in one United States Department of Transportation (DOT)-approved 55-gallon drum. Prior to use the drum was inspected for physical integrity and condition, and was left onsite with an appropriate label identifying the waste source location, physical contents, date, and generator's name. On May 6, 2008, this waste was transported by Dillard Environmental Services, Inc., and disposed of by Instrat, Inc.

4.0 SUMMARY OF RESULTS

As described in Section 3, the first quarter 2008 groundwater monitoring event took place on March 28, 2008. On that date water level measurements were made in the five site monitoring wells and the wells were sampled for chemical analysis. The groundwater samples were chemically analyzed at Torrent Laboratory Inc., a state-certified laboratory.

This section summarizes the water-level measurements, and groundwater chemical analysis results. Table 1 provides monitoring well construction details. Plate 3 shows the location of the monitoring wells.

4.1 GROUNDWATER LEVELS

On March 28, 2008 the depth to groundwater below the top of casings ranged from 4.35 to 5.63 feet. Groundwater surface elevations ranged from 4.43 to 5.23 feet above mean sea level (Table 2). Since February 18, 2008, the last time water levels were measured, the groundwater surface elevation for MW-1 and MW-2 rose about 1.5 feet and 0.43 feet, respectively; and groundwater surface elevations for MW-3, MW-4, and MW-5 dropped approximately 0.08 feet, 0.04 feet, and 0.07 feet, respectively.

The water-level measurements were used to estimate groundwater surface elevation contours, which are shown on Plate 3. Based on the March 28, 2008 depth to groundwater data, groundwater beneath the site was estimated to flow to the south, and to the north-northeast, with an approximate 0.018 ft/ft hydraulic gradient. The first quarter 2008 flow directions are similar to those found on February 18, 2008. On February 18, 2008 groundwater was estimated to flow to the north-northeast and to the southeast.

4.2 GROUNDWATER SAMPLE RESULTS

Groundwater samples collected from wells MW-1, MW-2, MW-3, MW-4, and MW-5 on March 28, 2007, were analyzed for TPH-g, TPH-d, BTEX and MTBE. Final purge characteristic data are summarized on Table 3. Groundwater analytical results are summarized in Table 4. Certified analytical laboratory reports are included in Appendix B.

4.2.1 Purge Characteristic Data

Prior to sample collection, the wells were purged to allow the inflow of water from the water bearing zones. Temperature, pH and electrical conductivity (EC) were measured during purging. Table 3 provides final purge characteristic data prior to collecting the samples in March 2008. As can be seen on the table, the EC levels were high, ranging from 7,574 µmhos/cm in MW-5 to 22,932 µmhos/cm in MW-2. These EC data are consistent with previous EC and TDS results (discussed in Section 2.2.3) which indicate the water is not suitable for drinking.

4.2.2 Total Petroleum Hydrocarbons and Volatile Organics

4.2.2.1 Environmental Screening Levels (ESLs)

The RWQCB developed ESLs to be used as initial indicators of potential impacts to human health or the environment. Kleinfelder compared the reported concentrations of each detected compound to its respective lowest ESL, as available and presented in the RWQCB's guidance document *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* (Interim Final – November 2007). Kleinfelder referenced the ESLs for groundwater where groundwater is not a current or potential source of drinking water, consistent with the TDS findings in fourth quarter 2007 (see Section 2.2.3) and first quarter 2008 EC purge data (see section 4.2.1), noted in RWQCB policy. In developing the groundwater ESLs, the RWQCB assumed that all groundwater could at some point in time potentially discharge to a body of surface water. The final (or lowest) groundwater ESLs where drinking water is not a concern consider aquatic habitat protection, indoor air impacts, and a ceiling level for taste and odor or other nuisance concerns.

4.2.2.2 Total Petroleum Hydrocarbons

Groundwater samples from wells MW-1, MW-2, MW-3, MW-4, and MW-5 were analyzed for TPH-g and TPH-d using EPA Methods 8260B and 8015M, respectively. The groundwater sample collected from MW-2 (adjacent to the former UST) was found to contain TPH-g at 47,000 µg/L, which is greater than the ESL of 640 µg/L. TPH-d was detected in the MW-2 sample at 300 µg/L, which is below the ESL of 500 µg/L. At well MW-1, located approximately 70 feet east of the former UST, TPH-g was reported

at 12,000 µg/l, exceeding the ESL. The groundwater samples collected from MW-4 (approximately 115 feet east-northeast of the former UST) and MW-5 (approximately 80 feet north-northwest of the former UST) were found to contain levels of TPH-g at 61 µg/L and 57 µg/L, respectively, both below the ESL. No TPH-g or TPH-d were detected at or above the reporting limits in the sample from MW-3, located approximately 35 feet north of the former UST.

As indicated on Table 4, TPH-g concentrations in wells MW-1 and MW-2 were higher than those found in December 2007, while TPH-d concentrations in the same wells were lower than those found in December 2007. Between January and March 2008, TPH-g concentrations increased in samples collected from MW-4 and MW-5; and the TPH-d concentrations decreased in samples collected from MW-5, while no TPH-d concentrations were reported for the sample collected at MW-4. Neither TPH-g nor TPH-d concentrations were reported for the sample collected at MW-3.

4.2.2.3 BTEX and MTBE

Groundwater samples from wells MW-1, MW-2, MW-3, MW-4, and MW-5 were analyzed for MTBE and BTEX using EPA Method 8260B. BTEX concentrations for the sample collected at MW-1 increased from December 2007 to March 2008, while BTEX concentrations for the sample collected at MW-2 decreased during the same period. The groundwater samples collected from MW-2 and MW-1 were found to contain benzene concentrations of 12,600 µg/l and 1,020 µg/l, respectively, exceeding its ESL. The reported ethylbenzene concentration in the sample collected from MW-2 was 619 µg/l, exceeding its ESL. All other BTEX concentrations in MW-1 and MW-2 were detected below their respective ESLs. No BTEX concentrations were reported for the samples collected at MW-3, MW-4, and MW-5. No MTBE concentrations were reported for samples from MW-1, MW-2, MW-3, MW-4, and MW-5.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations presented below are based on the groundwater monitoring event performed in March 2008.

5.1 CONCLUSIONS

5.1.1 Hydraulic Conditions

The direction of groundwater flow in March 2008 was to the south and north-northeast (Plate 3). This flow pattern is similar to that observed in February 2008 (southeast and north-northeast). Groundwater surface elevations rose in wells MW-1 and MW-2 between December 2007 and March 2008. The groundwater surface elevation declined in wells MW-3, MW-4, and MW-5 between December 2007 and March 2008.

5.1.2 Water Quality

Analytical results for the groundwater samples collected in March 2007 were similar to those collected during the December and September 2007 sampling events. Reported BTEX concentrations increased in samples collected from MW-2, and decreased in MW-1. Reported concentrations of TPH-g and benzene in the samples from well MW-1 and MW-2 exceeded ESLs. Ethylbenzene concentrations in the MW-2 sample exceeded its ESL. The concentration of TPH-g in the sample from MW-1 exceeded the ESL. The highest concentrations were found in the sample from MW-2, which is located adjacent to the former UST. Except for TPH-g, concentrations in groundwater samples collected from wells MW-4 and MW-5 were below laboratory reporting limits. No chemicals of concern were detected in groundwater from well MW-3.

5.2 RECOMMENDATIONS

The following recommendations are made at this time:

- Monitor groundwater conditions in the second quarter of 2008 to assess water quality trends (and any seasonal effects) and complete one year of quarterly monitoring.

6.0 LIMITATIONS

Kleinfelder prepared this report in accordance with generally accepted standards of care that exist in Alameda County at this time. All information gathered by Kleinfelder is considered confidential and will be released only upon written authorization of EOP or as required by law.

Kleinfelder offers various levels of investigation and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present. Although risk can never be eliminated, more-detailed and extensive investigations yield more information, which may help understand and manage the level of risk. Since detailed investigation and analysis involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including subsurface investigations or field tests, may be performed to reduce uncertainties. Acceptance of this report will indicate that EOP has reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may be discovered. Kleinfelder will assume no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials. Nothing contained in this reports should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, generator, or person who arranges for disposal, transport, storage or treatment of hazardous materials within the meaning of any governmental statute, regulation or order. EOP will be solely responsible for notifying all governmental agencies, and the public at large, of the existence, release, treatment or disposal of any hazardous materials observed at the project site, either before or during performance of Kleinfelder's services. EOP will be responsible for all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including cuttings and samples resulting from Kleinfelder's services.

Regulations and professional standards applicable to Kleinfelder's services are continually evolving. Techniques are, by necessity, often new and relatively untried. Different professionals may reasonably adopt different approaches to similar problems. As such, our services are intended to provide EOP with a source of professional advice, opinions and recommendations. Our professional opinions and recommendations are/will be based on our limited number of field observations and tests, collected and performed in accordance with the generally accepted engineering practice that exists at the time and may depend on, and be qualified by, information gathered previously by others and provided to Kleinfelder by EOP. Consequently, no warranty or guarantee, expressed of implied, is intended or made.

PLATES

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

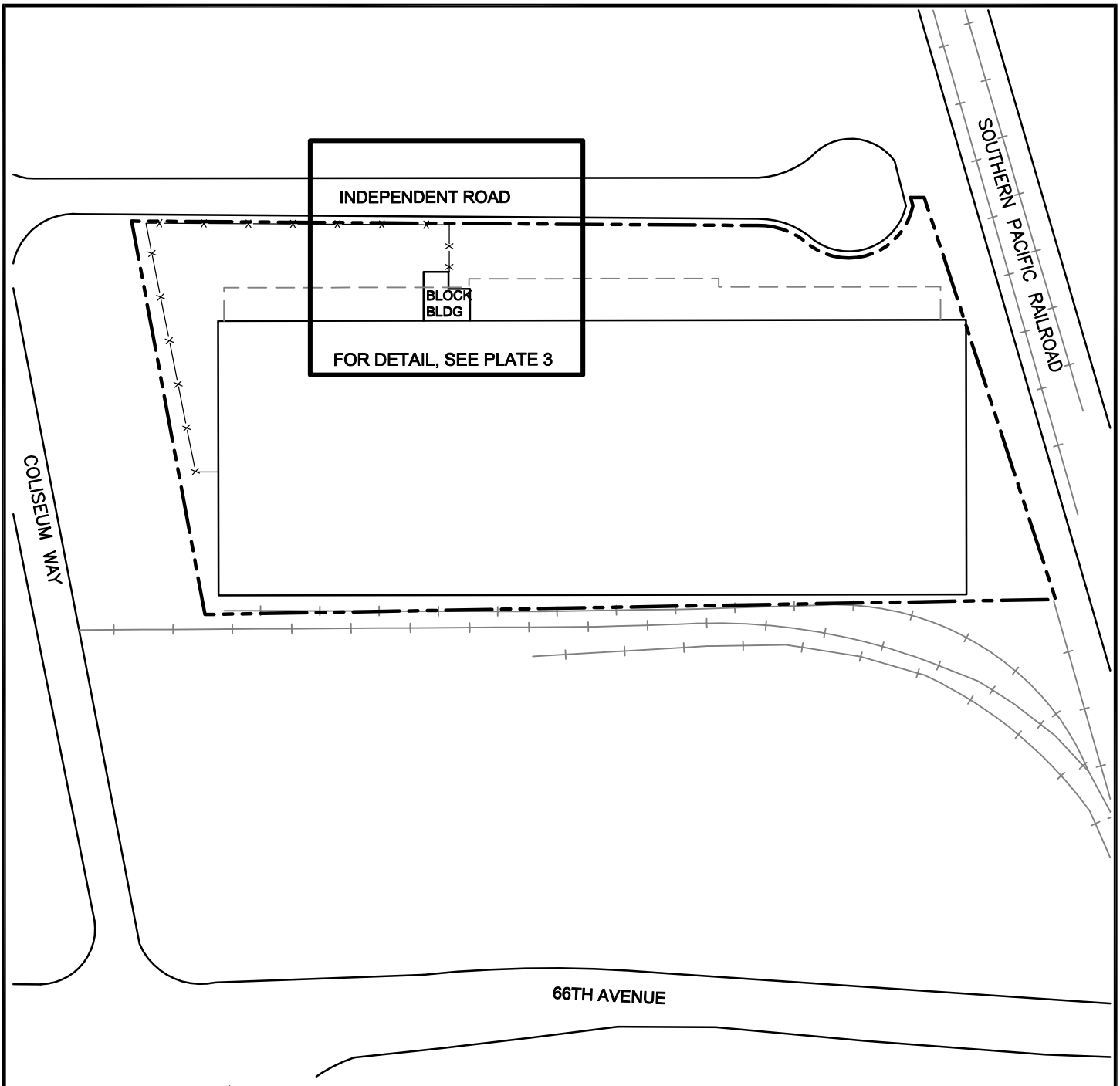
PROJECT NO.	54504 / 5B
DRAWN:	MAY 2008
DRAWN BY:	LGS
CHECKED BY:	CHA
FILE NAME:	SITE-VIC.dwg

SITE VICINITY MAP

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE
1

ATTACHED IMAGES: Images: VIC-MAP.jpg
ATTACHED XREFS: XRef: Eng-A_8x11_P_StyleA
PLEASANTON, CA CAD FILE: C:\Documents and Settings\lsue\My Documents_CADD_CADD proj\54504\5B\MAR 2008\ LAYOUT: Layout1 PLOTTED: 09 May 2008, 12:53pm, lsue



LEGEND

PROPERTY BOUNDARY

FENCE LINE

LIMITS OF BUILDING OVERHANG

NOTE: Locations are approximate.

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

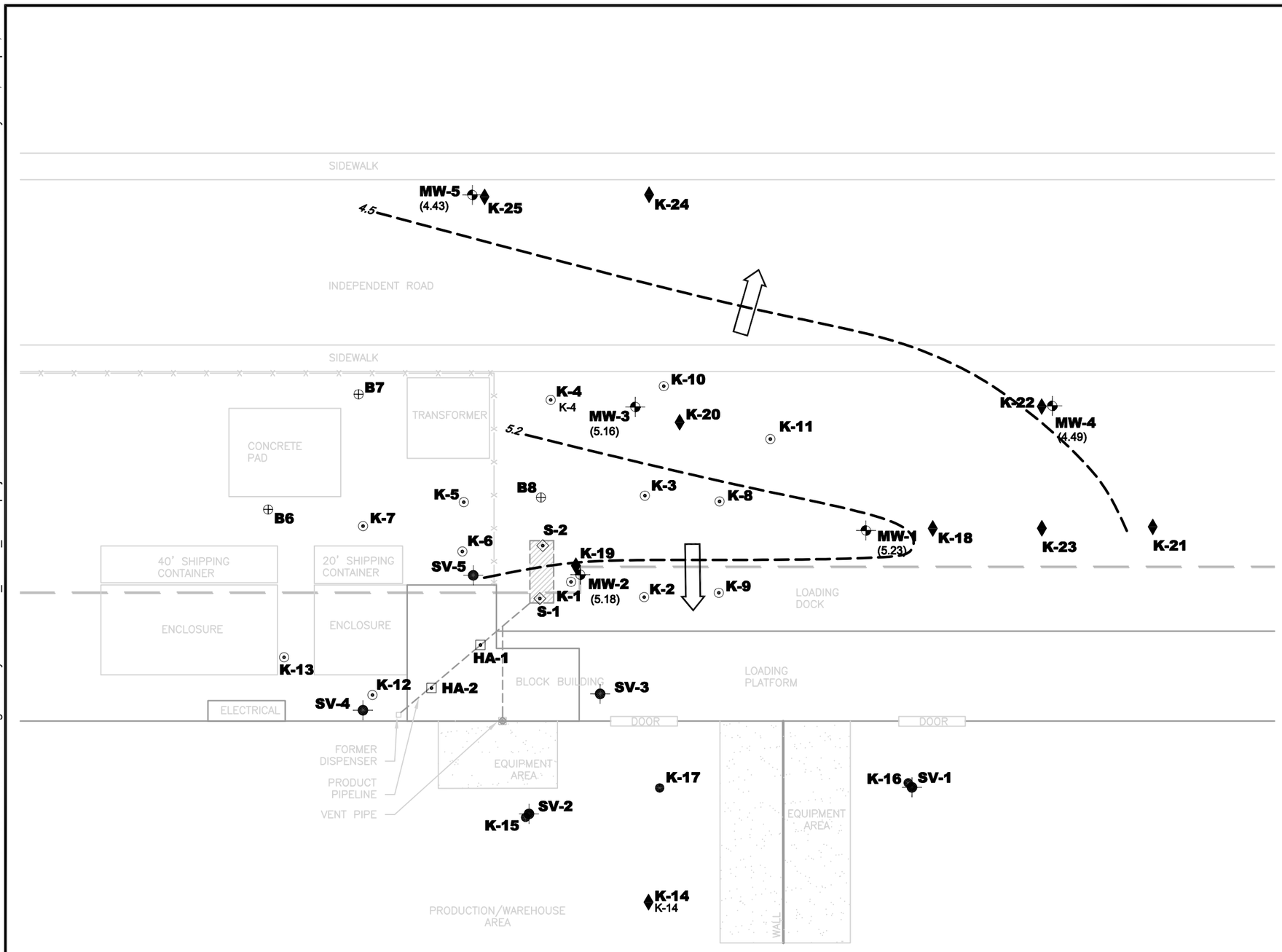
PROJECT NO.	54504 / 5B
DRAWN:	MAY 2008
DRAWN BY:	LGS
CHECKED BY:	CHA
FILE NAME:	SP OVERALL.dwg

SITE PLAN: OVERALL

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE **2**

ATTACHED IMAGES:
ATTACHED XREFS: XRef: Eng-A_8x11_P_StyleA
PLEASANTON, CA CAD FILE: C:\Documents and Settings\lsue\My Documents_CADD_CADD proj\54504\5B\MAR 2008\ LAYOUT: PLATE 2 PLOTTED: 09 May 2008, 12:59pm, lsue



LEGEND

- ROOF OVERHANG
- FENCE
- PRODUCT PIPELINE
- FORMER UNDERGROUND STORAGE TANK
- MONITORING WELL (Kleinfelder, March 2007)
- SOIL VAPOR BORING (Kleinfelder, March 2007)
- SOIL BORING depth 24-32 ft (Kleinfelder, March 2007)
- SOIL BORING depth 38-45 ft (Kleinfelder, March 2007 and February 2008)
- SOIL BORING (Kleinfelder, 2006)
- SOIL BORING (Golder Associates, August 2004)
- HAND AUGER
- UST CONFIRMATION SOIL SAMPLE
- (5.18) GROUNDWATER SURFACE ELEVATION (feet, msl)
- 20.5 GROUNDWATER ELEVATION CONTOURS (feet, msl)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

NOTE:
Golder boring B8 located in the field.
Locations of Golder borings B6 and B7 are approximate.

25 0 25
APPROXIMATE SCALE (feet)

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	54504 / 5B
DRAWN:	MAY 2008
DRAWN BY:	LGS
CHECKED BY:	CHA
FILE NAME:	GW-CONT_03-2008.dwg

GROUNDWATER SURFACE ELEVATION CONTOURS AND ESTIMATED GROUNDWATER FLOW: MARCH 28, 2008

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE
3

ATTACHED IMAGES: Images: 700 IR GW Contour 1Q.jpg
ATTACHED XREFS: XRef: SITEPLAN; XRef: Eng-B_11x17_L_StyleA.dwg
PLEASANTON, CA CAD FILE: C:\Documents and Settings\lsue\My Documents\Documents_CADD_CADD proj\54504\5B\MAR 2008\ LAYOUT: GW contour 1Q PLOTTED: 09 May 2008, 1:07pm, lsue

TABLES

Table 1

Monitoring Well Construction Details

EOP - 700 Independent Road, Oakland, California

Construction Details by Depth Intervals (Feet Below Ground Surface)								Survey Data			
Well ID	Installation Date	Boring Depth	Solid Casing	Screen Interval	Sand Pack	Bentonite Seal	Grout Seal	Top of Casing Elevation (Feet, msl)	Vault Elevation (Feet, msl)	Longitude	Latitude
MW-1	3/5/2007	25.0	0.25-15	15-25	13-25	11-13	0.75-11	9.64	9.96	-122.2052412	37.7569160
MW-2	3/5/2007	25.0	0.25-10	10-20	8-20	6-8 / 20-25	0.75-6	9.53	9.85	-122.2054245	37.7568140
MW-3	3/5/2007	25.0	0.25-13	13-23	11-24	9-11	0.75-9	10.79	11.10	-122.2054503	37.7569371
MW-4	1/23/2008	25.0	0.25-15	15-25	14-25	13-14	0.75-13	9.61	10.35	-122.2051431	37.7570547
MW-5	1/23/2008	28.0	0.25-18	18-28	17-28	16-17	0.75-16	9.75	10.06	-122.2056247	37.7569999

Notes:

Survey elevations North American Vertical Datum of 1988 (NAVD88), horizontal NAD 83.

Survey of MW-1, MW-2 and MW-3 by PLS Surveys, Inc., April 4, 2007

Survey of MW-4 and MW-5 by PLS Surveys, Inc., February 14, 2008

msl = mean sea level

Table 2

Depth to Water Measurements and Ground Water Surface Elevations

EOP - 700 Independent Road, Oakland, California

Date Measured		April 13, 2007		September 10, 2007		December 17, 2007		February 18, 2008		March 28, 2008	
Well ID	Measuring Point Elevation (feet, msl)	Depth to Water (feet)	Ground Water Surface Elevation (feet, msl)	Depth to Water (feet)	Ground Water Surface Elevation (feet, msl)	Depth to Water (feet)	Ground Water Surface Elevation (feet, msl)	Depth to Water (feet)	Ground Water Surface Elevation (feet, msl)	Depth to Water (feet)	Ground Water Surface Elevation (feet, msl)
MW-1	9.64	4.67	4.97	5.15	4.49	5.29	4.35	5.91	3.73	4.41	5.23
MW-2	9.53	4.61	4.92	5.42	4.11	5.02	4.51	4.78	4.75	4.35	5.18
MW-3	10.79	5.75	5.04	6.26	4.53	6.16	4.63	5.55	5.24	5.63	5.16
MW-4	9.61	--	--	--	--	--	--	5.08	4.53	5.12	4.49
MW-5	9.75	--	--	--	--	--	--	5.25	4.50	5.32	4.43

Notes:

Top of casing elevations for MW-1, MW-2 and MW-3 surveyed 4/4/07 by PLS Surveys, Inc.

Top of casing elevations for MW-4, and MW-5 surveyed 2/14/08 by PLS Surveys, Inc.

msl = Mean sea level

Table 3

Final Purge Characteristics in Groundwater

EOP - 700 Independent Road, Oakland, California

Well ID	Date Sampled	Gallons Purged	Final pH	Final Specific Conductivity (µmhos/cm)	Final Temperature (degrees C)
MW-1	9/10/2007	8.0	6.78	>3999[a]	18.7
	12/17/2007	10.0	6.84	>3999[a]	17.2
	3/28/2008	10.3	6.83	21,607	16.5
MW-2	9/10/2007	6.8	6.70	>3999[a]	19.4
	12/17/2007	7.0	6.70	>3999[a]	17.8
	3/28/2008	10.3	6.89	22,932	15.9
MW-3	9/10/2007	8.5	6.97	>3999[a]	22.3
	12/17/2007	9.0	7.11	>3999[a]	20.9
	3/28/2008	11.0	7.04	12,686	18.9
MW-4	1/31/2008	12.0	7.04	>3999[a]	18.7
	3/28/2008	16.0	7.15	12,069	17.8
MW-5	1/31/2008	12.0	6.85	>3999[a]	19.2
	3/28/2008	11.0	7.05	7,574	19.9

Acronyms:

a	Exceeds equipment limits
C	Celsius
µmhos/cm	microsiemens per centimeter

Table 4

Volatile Organic Compounds, Total Petroleum Hydrocarbons, and TDS in Groundwater

EOP - 700 Independent Road, Oakland, California

Sample Location	MW-1				MW-2				ESL*
Date Sampled	3/19/2007	9/10/2007	12/17/2007	3/28/2008	3/19/2007	9/10/2007	12/17/2007	3/28/2008	
TPH-d	390a	315a	186a	<100	**940a**	**1690a**	**3,770a**	300c	500
TPH-g	**3,300**	**1,700b**	**1,510b**	**12,000**	**38,000**	**52,100b**	**30,900b**	**47,000**	640
Benzene	162	145	204	**1,020**	**11,600**	**15,800**	**13,300**	**12,600**	540
Butylbenzene (sec-)	NT	0.9	2.41	NT	NT	<22.0	<22.0	NT	NE
1,2 Dichloroethane (EDC)	<1.1	<0.500	<0.500	NT	**226**	**611**	**568**	NT	200
Ethylbenzene	60.2	72.2	78.6	161	**588.0**	**1,120**	**1,350**	**619**	300
Isopropylbenzene	NT	11.6	9.96	NT	NT	69.1	73	NT	NE
Isopropyltoluene (4-)	NT	2.42	1.69	NT	NT	<22.0	<22.0	NT	NE
Naphthalene	NT	7.69	4.35	NT	NT	**231**	**227**	NT	210.0
Propylbenzene (n-)	NT	20.8	19	NT	NT	143	118	NT	NE
Toluene	205	56.1	15.1	19.1	274	**552**	172	67.3	400
Trimethylbenzene (1,2,4-)	NT	94.6	67	NT	NT	1,270	1,230	NT	NE
Trimethylbenzene (1,3,5-)	NT	17.1	6.12	NT	NT	650	352	NT	NE
Xylenes, total	351	197	56.7	60.0	2880	**5,420**	2,330	1,040	5300
Methyl tert butyl ether (MTBE)	<1.1	<0.500	<0.500	<1.10	<13.2	<22.0	<22.0	<22.0	1800
Total Dissolved Solids (TDS)	NT	NT	14,000,000	NT	NT	NT	17,000,000	NT	NE

Sample Location	MW-3				MW-4		MW-5		ESL*
Date Sampled	3/19/2007	9/10/2007	12/17/2007	3/28/2008	1/31/2008	3/28/2008	1/31/2008	3/28/2008	
TPH-d	<100	<100	<100	<100	< 100	<100	**544p**	<100	500
TPH-g	<50	<50	<50	<50	56.0e	61d	55.0e	57d	640
Benzene	<0.500	<0.500	<0.500	<0.500	< 0.500	<0.500	< 0.500	<0.500	540
Butylbenzene (sec-)	NT	<0.500	<0.500	NT	NT	NT	NT	NT	NE
1,2 Dichloroethane (EDC)	<0.500	<0.500	<0.500	NT	NT	NT	NT	NT	200
Ethylbenzene	<0.500	<0.500	<0.500	<0.500	< 0.500	<0.500	< 0.500	<0.500	300
Isopropylbenzene	NT	<1.0	<1.0	NT	NT	NT	NT	NT	NE
Isopropyltoluene (4-)	NT	<0.500	<0.500	NT	NT	NT	NT	NT	NE
Naphthalene	NT	<0.500	<0.500	NT	NT	NT	NT	NT	210.0
Propylbenzene (n-)	NT	<0.500	<0.500	NT	NT	NT	NT	NT	NE
Toluene	<0.500	<0.500	<0.500	<0.500	< 0.500	<0.500	< 0.500	<0.500	400
Trimethylbenzene (1,2,4-)	NT	<0.500	<0.500	NT	NT	NT	NT	NT	NE
Trimethylbenzene (1,3,5-)	NT	<0.500	<0.500	NT	NT	NT	NT	NT	NE
Xylenes, total	<1.5	<1.5	<1.5	<1.50	< 1.50	<1.50	< 1.50	<1.50	5300
Methyl tert butyl ether (MTBE)	<0.500	<0.500	<0.500	<0.500	< 0.500	<0.500	< 0.500	<0.500	1800
Total Dissolved Solids (TDS)	NT	NT	8,600,000	NT	NT	NT	NT	NT	NE

Notes:

All results in micrograms per liter (ug/l). Values in bold exceed corresponding ESLs.

a - Sample chromatogram does not resemble typical diesel pattern (fuel lighter than diesel). Lighter end hydrocarbons within the diesel range quantified as diesel.

b - Although TPH as gasoline is present, result is elevated due to the presence of non-target compounds within the gasoline quantitative range.

c - Although TPH as Gasoline constituents are present, results are elevated due to the presence of non-target compounds within range of C5-C12 quantified as Gasoline.

d - Does not match typical gasoline pattern. TPH value contains only non-target compounds within gasoline quantitative range.

e - Does not match typical gasoline pattern. Reported values are the result of presence of non-gasoline compounds within the gasoline quantitation range.

NE - Not established

NT - Not tested

* ESL - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, Interim Final November 2007. Lowest level reported from:
Table F-1b. Groundwater Screening Levels, groundwater IS NOT a current or potential drinking water source.
Table F-4b Summary of California EPA Continuous and maximum aquatic habitat goals.

Acronyms:

TPH-d - Total Petroleum Hydrocarbons - diesel

TPH-g - Total Petroleum Hydrocarbons - gasoline

APPENDIX A

CHAIN OF CUSTODY

KLEINFELDER

0803202

PROJECT NO.	PROJECT NAME	RECEIVING LAB:
54504/5B	~~5000~~ Independent Rd. Quarterly GW Sampling	Torrent Laboratory
L.P. NO. (P.O. NO.)	SAMPLERS (Signature/Number)	
	Gabriel Tuson	

	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS
1	03/28/08	14-16-00	MW-1	W	4	various
2		16-30-00	MW-2	W	4	
3		12-44-00	MW-3	W	4	
4		10-32-00	MW-4	W	4	
5	↓	11-44-00	MW-5	W	4	↓
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

ANALYSIS: TPH-d (EPA 8015M)* and MTBE/BTEX (EPA 8260B)

Gabriel Tuson 03/28/08

Gabriel Tuson 03/28/08

Gabriel Tuson 03/28/08

INSTRUCTIONS/REMARKS: *please perform silica gel cleanup on TPH-d analysis.

001
002
003
004
005

* HCl in all VOAs of all samples was dumped because of effervescence.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Gabriel Tuson	03/28/08 1650	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
H.S.	3/28/08 5:45	Raj Kang
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Instructions/Remarks: -5 day TAT (standard)

Send Results To: Charlie Almestad
KLEINFELDER calmestad@kleinfelder.com
1970 Broadway
SUITE 710
Oakland, CA 94612
(510) 628-9000
Attn: Tricia Walters pwalters@kleinfelder.com

M-60

White – Sampler

Canary – Return Copy To Shipper

Pink – Lab Copy

CHAIN OF CUSTODY

№ 1172

APPENDIX B

CERTIFIED ANALYTICAL LABORATORY REPORTS

Torrent
LABORATORY, INC.

April 04, 2008

Charlie Almestad
KLEINFELDER
1970 Broadway, Suite 710
Oakland, CA 94612

TEL: (510) 628-9000
FAX (510) 628-9009

RE: 54504/5B

Order No.: 0803202

Dear Charlie Almestad:

Torrent Laboratory, Inc. received 5 samples on 3/28/2008 for the analyses presented in the following report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.
Reported data is applicable for only the samples received as part of the order number referenced above.

Torrent Laboratory, Inc, is certified by the State of California, ELAP #1991. If you have any questions regarding these tests results, please feel free to contact the Project Management Team at (408)263-5258;ext: 204.

Sincerely,

Laboratory Director 4/4/08 Date

Patti Sandrock
QA Officer

TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: Charlie Almestad
KLEINFELDER

Date Received: 3/28/2008
Date Reported:

Client Sample ID: MW-1
Sample Location: EOP 700 Independent Rd
Sample Matrix: WATER
Date/Time Sampled 3/28/2008 2:16:00 PM

Lab Sample ID: 0803202-001
Date Prepared: 3/31/2008

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	4/1/2008	0.1	1	0.100	ND	mg/L	R15830
Surr: Pentacosane	SW8015B	4/1/2008	0	1	40-120	88.0	%REC	R15830
Benzene	SW8260B	3/31/2008	0.5	44	22.0	1020	µg/L	R15841
Ethylbenzene	SW8260B	3/31/2008	0.5	2.2	1.10	161	µg/L	R15841
Methyl tert-butyl ether (MTBE)	SW8260B	3/31/2008	0.5	2.2	1.10	ND	µg/L	R15841
Toluene	SW8260B	3/31/2008	0.5	2.2	1.10	19.1	µg/L	R15841
Xylenes, Total	SW8260B	3/31/2008	1.5	2.2	3.30	60.0	µg/L	R15841
Surr: Dibromofluoromethane	SW8260B	3/31/2008	0	44	61.2-131	110	%REC	R15841
Surr: Dibromofluoromethane	SW8260B	3/31/2008	0	2.2	61.2-131	117	%REC	R15841
Surr: 4-Bromofluorobenzene	SW8260B	3/31/2008	0	44	64.1-120	97.5	%REC	R15841
Surr: 4-Bromofluorobenzene	SW8260B	3/31/2008	0	2.2	64.1-120	96.2	%REC	R15841
Surr: Toluene-d8	SW8260B	3/31/2008	0	44	75.1-127	113	%REC	R15841
Surr: Toluene-d8	SW8260B	3/31/2008	0	2.2	75.1-127	81.5	%REC	R15841
TPH (Gasoline)	SW8260B(TPH)	3/31/2008	50	44	2200	12000	µg/L	G15841
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/31/2008	0	44	58.4-133	172	%REC	G15841

Note:S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a matrix effect. Although TPH as Gasoline constituents are present, results are elevated due to the presence of non-target compounds within range of C5-C12 quantified as Gasoline

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Charlie Almestad
KLEINFELDER

Date Received: 3/28/2008
Date Reported:

Client Sample ID: MW-2
Sample Location: EOP 700 Independent Rd
Sample Matrix: WATER
Date/Time Sampled 3/28/2008 4:30:00 PM

Lab Sample ID: 0803202-002
Date Prepared: 3/31/2008

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	4/1/2008	0.1	1	0.113	0.300x	mg/L	R15830
Surr: Pentacosane	SW8015B	4/1/2008	0	1	40-120	88.0	%REC	R15830
Note:x-Sample chromatogram does not resemble typical diesel pattern. Lighter end hydrocarbon peaks within the diesel range quantitated as diesel.								
Benzene	SW8260B	3/31/2008	0.5	220	110	12600	µg/L	R15841
Ethylbenzene	SW8260B	3/31/2008	0.5	44	22.0	619	µg/L	R15841
Methyl tert-butyl ether (MTBE)	SW8260B	3/31/2008	0.5	44	22.0	ND	µg/L	R15841
Toluene	SW8260B	3/31/2008	0.5	44	22.0	67.3	µg/L	R15841
Xylenes, Total	SW8260B	3/31/2008	1.5	44	66.0	1040	µg/L	R15841
Surr: Dibromofluoromethane	SW8260B	3/31/2008	0	44	61.2-131	114	%REC	R15841
Surr: Dibromofluoromethane	SW8260B	3/31/2008	0	220	61.2-131	94.5	%REC	R15841
Surr: 4-Bromofluorobenzene	SW8260B	3/31/2008	0	44	64.1-120	95.9	%REC	R15841
Surr: 4-Bromofluorobenzene	SW8260B	3/31/2008	0	220	64.1-120	96.6	%REC	R15841
Surr: Toluene-d8	SW8260B	3/31/2008	0	44	75.1-127	87.3	%REC	R15841
Surr: Toluene-d8	SW8260B	3/31/2008	0	220	75.1-127	91.4	%REC	R15841
TPH (Gasoline)	SW8260B(TPH)	3/31/2008	50	220	11000	47000	µg/L	G15841
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/31/2008	0	220	58.4-133	121	%REC	G15841
Note: Although TPH as Gasoline constituents are present, results are elevated due to the presence of non-target compounds within range of C5-C12 quantified as Gasoline								

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Charlie Almestad
KLEINFELDER

Date Received: 3/28/2008
Date Reported:

Client Sample ID: MW-3
Sample Location: EOP 700 Independent Rd
Sample Matrix: WATER
Date/Time Sampled 3/28/2008 12:44:00 PM

Lab Sample ID: 0803202-003
Date Prepared: 3/31/2008

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	4/1/2008	0.1	1	0.100	ND	mg/L	R15830
Surr: Pentacosane	SW8015B	4/1/2008	0	1	40-120	91.0	%REC	R15830
Benzene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Ethylbenzene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Methyl tert-butyl ether (MTBE)	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Toluene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Xylenes, Total	SW8260B	3/31/2008	1.5	1	1.50	ND	µg/L	R15841
Surr: Dibromofluoromethane	SW8260B	3/31/2008	0	1	61.2-131	106	%REC	R15841
Surr: 4-Bromofluorobenzene	SW8260B	3/31/2008	0	1	64.1-120	100	%REC	R15841
Surr: Toluene-d8	SW8260B	3/31/2008	0	1	75.1-127	95.2	%REC	R15841
TPH (Gasoline)	SW8260B(TPH)	3/31/2008	50	1	50	ND	µg/L	G15841
Surr: 4-Bromoflurobenzene	SW8260B(TPH)	3/31/2008	0	1	58.4-133	103	%REC	G15841

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Charlie Almestad
KLEINFELDER

Date Received: 3/28/2008
Date Reported:

Client Sample ID: MW-4
Sample Location: EOP 700 Independent Rd
Sample Matrix: WATER
Date/Time Sampled 3/28/2008 10:32:00 AM

Lab Sample ID: 0803202-004
Date Prepared: 3/31/2008

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	4/1/2008	0.1	1	0.100	ND	mg/L	R15830
Surr: Pentacosane	SW8015B	4/1/2008	0	1	40-120	85.0	%REC	R15830
Benzene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Ethylbenzene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Methyl tert-butyl ether (MTBE)	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Toluene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Xylenes, Total	SW8260B	3/31/2008	1.5	1	1.50	ND	µg/L	R15841
Surr: Dibromofluoromethane	SW8260B	3/31/2008	0	1	61.2-131	84.9	%REC	R15841
Surr: 4-Bromofluorobenzene	SW8260B	3/31/2008	0	1	64.1-120	99.5	%REC	R15841
Surr: Toluene-d8	SW8260B	3/31/2008	0	1	75.1-127	103	%REC	R15841
TPH (Gasoline)	SW8260B(TPH)	3/31/2008	50	1	50	61x	µg/L	G15841
Surr: 4-Bromoflurobenzene	SW8260B(TPH)	3/31/2008	0	1	58.4-133	121	%REC	G15841

Note: x - Does not match typical gasoline pattern. TPH value contains only non-target compounds within gasoline quantitative range.

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Charlie Almestad
KLEINFELDER

Date Received: 3/28/2008
Date Reported:

Client Sample ID: MW-5
Sample Location: EOP 700 Independent Rd
Sample Matrix: WATER
Date/Time Sampled 3/28/2008 11:44:00 AM

Lab Sample ID: 0803202-005
Date Prepared: 3/31/2008

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	4/1/2008	0.1	1	0.100	ND	mg/L	R15830
Surr: Pentacosane	SW8015B	4/1/2008	0	1	40-120	80.0	%REC	R15830
Benzene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Ethylbenzene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Methyl tert-butyl ether (MTBE)	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Toluene	SW8260B	3/31/2008	0.5	1	0.500	ND	µg/L	R15841
Xylenes, Total	SW8260B	3/31/2008	1.5	1	1.50	ND	µg/L	R15841
Surr: Dibromofluoromethane	SW8260B	3/31/2008	0	1	61.2-131	91.1	%REC	R15841
Surr: 4-Bromofluorobenzene	SW8260B	3/31/2008	0	1	64.1-120	98.0	%REC	R15841
Surr: Toluene-d8	SW8260B	3/31/2008	0	1	75.1-127	104	%REC	R15841
TPH (Gasoline)	SW8260B(TPH)	3/31/2008	50	1	50	57x	µg/L	G15841
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/31/2008	0	1	58.4-133	121	%REC	G15841

Note: x - Does not match typical gasoline pattern. TPH value contains only non-target compounds within gasoline quantitative range.

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Definitions, legends and Notes

Note	Description
ug/kg	Microgram per kilogram (ppb, part per billion).
ug/L	Microgram per liter (ppb, part per billion).
mg/kg	Milligram per kilogram (ppm, part per million).
mg/L	Milligram per liter (ppm, part per million).
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate.
MDL	Method detection limit.
MRL	Modified reporting limit. When sample is subject to dilution, reporting limit times dilution factor yields MRL.
MS/MSD	Matrix spike/matrix spike duplicate.
N/A	Not applicable.
ND	Not detected at or above detection limit.
NR	Not reported.
QC	Quality Control.
RL	Reporting limit.
% RPD	Percent relative difference.
a	pH was measured immediately upon the receipt of the sample, but it was still done outside the holding time.
sub	Analyzed by subcontracting laboratory, Lab Certificate #

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Torrent Laboratory, Inc.

Date: *04-Apr-08*

CLIENT: KLEINFELDER
Work Order: 0803202
Project: 54504/5B

ANALYTICAL QC SUMMARY REPORT

BatchID: G15841

Sample ID: **MB-G**	SampType: **MBLK**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/31/2008**	RunNo: **15841**
Client ID: **ZZZZZ**	Batch ID: **G15841**	TestNo: **SW8260B(TP**		Analysis Date: **3/31/2008**	SeqNo: **227342**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	50									
Surr: 4-Bromofllurobenzene	12.00	0	11.36	0	106	58.4	133				

Sample ID: **LCS-G**	SampType: **LCS**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/31/2008**	RunNo: **15841**
Client ID: **ZZZZZ**	Batch ID: **G15841**	TestNo: **SW8260B(TP**		Analysis Date: **3/31/2008**	SeqNo: **227343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	222.0	50	227	46	77.5	52.4	127				
Surr: 4-Bromofllurobenzene	14.00	0	11.36	0	123	58.4	133				

Sample ID: **LCSD-G**	SampType: **LCSD**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **4/1/2008**	RunNo: **15841**
Client ID: **ZZZZZ**	Batch ID: **G15841**	TestNo: **SW8260B(TP**		Analysis Date: **4/1/2008**	SeqNo: **227344**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	242.0	50	227	46	86.3	52.4	127	222	8.62	20	
Surr: 4-Bromofllurobenzene	14.00	0	11.36	0	123	58.4	133	0	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: KLEINFELDER
Work Order: 0803202
Project: 54504/5B

ANALYTICAL QC SUMMARY REPORT

BatchID: R15830

Sample ID: **WDSG080331A-MB** SampType: **MBLK** TestCode: **TPHDSG_W** Units: **mg/L** Prep Date: **3/31/2008** RunNo: **15830**
Client ID: **ZZZZZ** Batch ID: **R15830** TestNo: **SW8015B** Analysis Date: **4/1/2008** SeqNo: **227145**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel-SG)	ND	0.100									
Surr: Pentacosane	0.09100	0	0.1	0	91.0	53.3	124				

Sample ID: **WDSG080331A-LCS** SampType: **LCS** TestCode: **TPHDSG_W** Units: **mg/L** Prep Date: **3/31/2008** RunNo: **15830**
Client ID: **ZZZZZ** Batch ID: **R15830** TestNo: **SW8015B** Analysis Date: **4/1/2008** SeqNo: **227146**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel-SG)	0.4750	0.100	1	0	47.5	30	68.5				
Surr: Pentacosane	0.08200	0	0.1	0	82.0	46.8	104				

Sample ID: **WDSG080331A-LCS** SampType: **LCSD** TestCode: **TPHDSG_W** Units: **mg/L** Prep Date: **3/31/2008** RunNo: **15830**
Client ID: **ZZZZZ** Batch ID: **R15830** TestNo: **SW8015B** Analysis Date: **4/1/2008** SeqNo: **227147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel-SG)	0.4880	0.100	1	0	48.8	30	68.5	0.475	2.70	30	
Surr: Pentacosane	0.08800	0	0.1	0	88.0	46.8	104	0	0	0	

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: KLEINFELDER
Work Order: 0803202
Project: 54504/5B

ANALYTICAL QC SUMMARY REPORT

BatchID: R15841

Sample ID: **MB**	SampType: **MBLK**	TestCode: **8260B_W**	Units: **µg/L**	Prep Date: **3/31/2008**	RunNo: **15841**
Client ID: **ZZZZZ**	Batch ID: **R15841**	TestNo: **SW8260B**		Analysis Date: **3/31/2008**	SeqNo: **227330**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500									
Ethylbenzene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
Toluene	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: Dibromofluoromethane	11.38	0	11.36	0	100	61.2	131				
Surr: 4-Bromofluorobenzene	9.840	0	11.36	0	86.6	64.1	120				
Surr: Toluene-d8	11.52	0	11.36	0	101	75.1	127				

Sample ID: **LCS**	SampType: **LCS**	TestCode: **8260B_W**	Units: **µg/L**	Prep Date: **3/31/2008**	RunNo: **15841**
Client ID: **ZZZZZ**	Batch ID: **R15841**	TestNo: **SW8260B**		Analysis Date: **3/31/2008**	SeqNo: **227333**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	14.35	0.500	17.04	0	84.2	66.9	140				
Toluene	17.46	0.500	17.04	0	102	76.6	123				
Surr: Dibromofluoromethane	11.14	0	11.36	0	98.1	61.2	131				
Surr: 4-Bromofluorobenzene	11.33	0	11.36	0	99.7	64.1	120				
Surr: Toluene-d8	10.85	0	11.36	0	95.5	75.1	127				

Sample ID: **LCSD**	SampType: **LCSD**	TestCode: **8260B_W**	Units: **µg/L**	Prep Date: **3/31/2008**	RunNo: **15841**
Client ID: **ZZZZZ**	Batch ID: **R15841**	TestNo: **SW8260B**		Analysis Date: **3/31/2008**	SeqNo: **227334**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	16.34	0.500	17.04	0	95.9	66.9	140	14.35	13.0	20	
Toluene	15.45	0.500	17.04	0	90.7	76.6	123	17.46	12.2	20	
Surr: Dibromofluoromethane	14.37	0	11.36	0	126	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	9.190	0	11.36	0	80.9	64.1	120	0	0	0	
Surr: Toluene-d8	11.27	0	11.36	0	99.2	75.1	127	0	0	0	

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits